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10/665,649	09/19/2003	Dick T. Van Manen	01-1333-C	6076

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EXAMINER

DANIELS, MATTHEW J

ART UNIT PAPER NUMBER

1732

DATE MAILED: 09/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/665,649

Applicant(s)

VAN MANEN, DICK T.

Examiner

Matthew J. Daniels

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1732

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 13 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 5-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 5-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 112*

1. Rejections set forth previously under this section are withdrawn in view of the claim amendments.

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claim rejections set forth previously under this section are withdrawn in favor of the following rejections:
3. **Claims 1, 5, 11, and 12** are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Kruck (USPN 4893478). **As to Claim 1**, Kruck teaches a method for molding panels in a sheet molding system comprised of a thermoplastic sheet delivery station and two mold halves, the method comprising:
  - a) delivering two sheeting layers of thermoplastic material between the two mold halves (Fig. 15);
  - b) inserting a rigidizing insert between the two sheeting layers of thermoplastic material (Fig. 15, item 288);

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- c) closing the mold halves to bring the two sheeting layers of thermoplastic material in contact with the insert to form a thermoplastic-insert sandwich (Fig. 16); and
- d) compressing the thermoplastic-insert sandwich between the mold halves to form a panel (Figs. 17-19).

Kruck does not explicitly teach that the closing of the mold halves brings the material in contact with the insert. However, because Kruck teaches that the mold insert is substantially the same size as the gap between the mold halves when the sheets are compressed, it would have been an inherent aspect of the invention, or in the alternative, obvious to contact the insert with the closing mold halves in order to use it to help the sheets conform to the mold. **As to Claim 5**, see Fig. 15, Item 274. **As to Claim 11**, see Fig. 15, items 270 and 272. **As to Claim 12**, see 14: 22-40.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Rejections set forth previously under this section are withdrawn in favor of the following rejections:

5. **Claims 2 and 3** are rejected under 35 U.S.C. 103(a) as being unpatentable over Kruck (USPN 4893478) in view of Svensson (USPN 4961810). Kruck teaches the subject matter of

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Claim 1 above under 35 USC 102(b), or in the alternative under 35 USC 103(a). As to Claims 2 and 3, Kruck is silent to the vertical position above the mold halves and delivery downwardly. However, Svensson teaches the providing two sheeting layers, inserting a rigid insert, and providing a mold apparatus including two compression halves, providing simple material advance with the aid of gravity. Svensson therefore provides the vertical position above the mold halves and delivery downwardly. It would have been prima facie obvious to one of ordinary skill in the art at the time of the invention to incorporate the method of Svensson into that of Kruck in order to provide simple material advance with the aid of gravity, and to avoid dragging of material on a horizontal mold, such as in the particular configuration shown by Kruck in Fig. 15.

6. **Claim 6** is rejected under 35 U.S.C. 103(a) as being unpatentable over Kruck (USPN 4893478) in view of Lemelson (USPN 3530029). Kruck teaches the subject matter of Claim 5 above under 35 USC 102(b), or in the alternative under 35 USC 103(a). **As to Claim 6**, Kruck is silent to the calendaring rolls. However, Lemelson teaches continuously extruded, continuously calendared sheets of material filled with reinforcement (12:43-55). It would have been prima facie obvious to one of ordinary skill in the art at the time of the invention to incorporate the method of Lemelson into that of Kruck in order to provide pre-deformed sheets to assist in cavity formation (Lemelson, 6:8-31) and to accommodate the reinforcement of Kruck.

7. **Claim 7** is rejected under 35 U.S.C. 103(a) as being unpatentable over Kruck (USPN 4893478) in view of Mieck (Faser-Matrix-Haftung in Kunststoffverbunden aus

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thermoplastischer Matrix und Flachs, 2, Die Angewandte Makromolekulare Chemie, Vol. 225, 1995, pages 37-49). Kruck teaches the subject matter of Claim 1 above under 35 USC 102(b), or in the alternative under 35 USC 103(a). **As to Claim 7**, Kruck teaches a sheet of material, but is silent to the claimed sheet composition. However, Mieck teaches a flax/polypropylene composition (Title). It would have been prima facie obvious to one of ordinary skill in the art at the time of the invention to incorporate the method of Mieck into that of Kruck because Kruck teaches that any suitable material should be chosen, particularly one having high impact characteristics (14:27-29), which Mieck's reinforced polypropylene mixture would provide.

8. **Claims 8-10** are rejected under 35 U.S.C. 103(a) as being unpatentable over Kruck (USPN 4893478) in view of Gonas (USPN 5700050). Kruck teaches the subject matter of Claim 1 above under 35 USC 102(b), or in the alternative under 35 USC 103(a). As to Claims 8-10, Kruck is silent to the claimed carpet covering and orientation. However, Gonas teaches that the application of carpeting to a sheet in a mold is conventional (Figs. 7-9 and 3:47-58). It would have been prima facie obvious to one of ordinary skill in the art at the time of the invention to incorporate the method of Gonas into that of Kruck in order to provide an aesthetically and physically pleasing surface. Additionally, the carpet is interpreted to be applied to the "top side" (Claim 10), however, this term is relative and does not distinguish the invention from the method of Gonas.

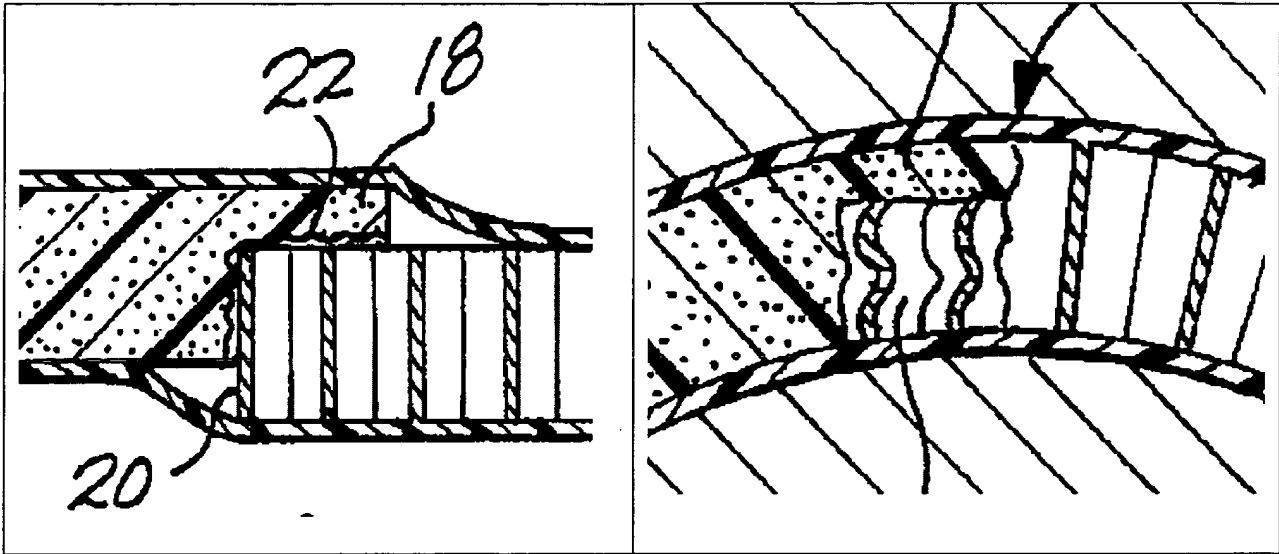
***Response to Arguments***

9. Applicant's arguments, see "102 rejections" on page 5 of the remarks filed 13 June 2006 with respect to the rejection of Claim 1 under 35 USC 102 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Kruck (see the rejections above).

The following remarks (page 5 under "102 rejections", beginning at line 7) with regard to the claimed invention are also noted:

<p>The mold halves are then closed to bring the sheeting layers into contact with the insert, followed by compressing to form the panel.</p>
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Applicant's remarks appear to assert that the scope of the claim excludes subject matter in which contact between the sheeting layers and insert occurs prior to closing of the mold halves, and instead asserts that the mold halves bring the sheeting layers into contact with the insert. Chin teaches that the closing of the mold halves brings the sheeting layers into *further* contact with the insert (see the portions of Figs. 5 and 6 reproduced on the next page), and Applicant's arguments indicate that this teaching falls outside of the claimed invention.



Left: Portion of Fig. 5 of Chin (USPN 4917747)

Right: Portion of Fig. 6 of Chin (USPN 4917747)

### *Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew J. Daniels whose telephone number is (571) 272-2450. The examiner can normally be reached on Monday - Friday, 8:00 am - 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Johnson can be reached on (571) 272-1176. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MJD 8/29/06

*Christina Johnson*  
CHRISTINA JOHNSON  
PRIMARY EXAMINER  
8/29/06